



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,662	09/15/2003	Simon Anne de Molina	1316N-001683	1855
27572	7590	11/26/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			WILLIAMS, THOMAS J	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,662

Applicant(s)

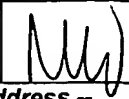
MOLINA ET AL.

Examiner

Thomas J. Williams

Art Unit

3683



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed September 29, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-7 and 9-18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,596,321 to Harper et al.

Re-claims 1, 11 and 17, Harper et al. discloses a shock absorber and piston assembly, comprising: a shock absorber piston having a first face 36a and an opposed second face 36b a plurality of fluid passages extending between the first face and the second face; and a plurality of valves 54 attached to the piston, including: at least two rebound valves, each connectable to at least one of the fluid passages, and at least two compression valves, each connectable to at least one of the fluid passages; wherein each of the valves actuates at an individually adjustable valve opening pressure and each of the valves comprises: a pin 62 having a threaded connection end 62d a compressible device 92/97 connectable to the pin, the compressible device positions the valve between a closed position and a closed position, a fastener 80 is fastened to the threaded connection end, the fastener is a nut operable to vary the preload of the compressible device, column 8 lines 63-67. The shock absorber is provided with a pressure tube.

Re-claims 3-5 and 16, the compressible device is a coil spring that varies the valve opening pressure.

Art Unit: 3683

Re-claim 6, orifice 72 functions as a bleed disc.

Re-claim 7, a washer 82 is connected with the threaded end portion.

Re-claim 9, a shim 90 is disposed between the washer and compressible device to vary a preload of the compressible device, see column 8 line 68 to column 9 line 1.

Re-claim 10, see figures.

Re-claims 12 and 13, Harper et al. discloses that a fluid is used within the shock absorber, this broadly encompasses both a gas and a hydrocarbon based liquid (such as oil, as is common in the art).

Re-claim 14, the valves further comprise a washer 82 linking the compressible device to the pin 62; and a valve plate 64 that seals the passages of the rebound and compression valves.

Re-claim 15, element 58 is interpreted as the land portion adjacent the valve plate.

Re-claim 18, the piston rod will have a first end fitting adapted for connection with an automobile vehicle.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

Art Unit: 3683

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et al. in view of US 4,823,922 to Ergun.

Harper et al. fails to specifically teach the shock absorber having a tubular end sliding over the piston tube and a free end of the piston rod. Ergun teaches a shock absorber having a tubular shield positioned over the piston tube and a freely extending end of the piston rod, the rod is equipped with an end connection. It would have been obvious to one of ordinary skill in the art to have utilized the teachings of Ergun regarding the tubular end disposed over the piston tube of Harper et al., thus providing a means of protection for the piston tube.

7. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harper et al. in view of US 3,706,363 to Faure.

Re-claims 20-22, Harper et al. teaches a method to dampen an automobile ride deflection, the method comprising: having at least two rebound valves opening at one face of the piston, having at least two compression valves opening to a second face of the piston, rotating a nut 80 to vary the opening pressure of the rebound valves, Harper et al. further teaches the use of shims to vary the opening pressure. However, Harper et al. fails to teach varying the opening pressure for both the rebound and compression valves such that they open in a sequential manner.

Faure teaches a shock absorber having rebound and compression valves calibrated such that they open in sequential order, see abstract. It would have been obvious to one of ordinary skill in the art to have utilized the teachings of Faure with regards to sequential opening of the

Art Unit: 3683

rebound and compression valves in the shock absorber of Harper et al., thus achieving a damping curve with a wide comfort range.

Re-claim 23, Harper et al. fails to teach varying the diameter of the at least one fluid passage. Faure teaches varying the diameter of at least one passage for adjusting the damping curve. It would have been obvious to one of ordinary skill in the art to have utilized the teachings of Faure when having adjusted the damping curve of Harper et al., thus obtaining the desired damping curve.

Response to Arguments

8. Applicant's arguments with respect to claims 1, 3-7, and 9-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 3683

10. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci, can be reached at (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

November 22, 2004

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams

AS 3683

11/22/04